

Supplemental
Notice of Allowability

Application No.

10/016,291

Examiner

Apu M Mofiz

Applicant(s)

SHPEISMAN ET AL.

Art Unit

2165

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 03/18/2005.
2. ☒ The allowed claim(s) is/are 1-3,5-8,10-13,15-18,20-23,25-28,30 and currently renumbered as 1-24.
3. ☒ The drawings filed on 03/18/2005 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|----------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____. |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____. | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____. |

DETAILED ACTION

1. Applicant's amendments and arguments filed November 10, 2004 have been fully considered and they are deemed to be persuasive.

EXAMINER'S AMENDMENT

2. Authorization for Examiner's Amendment was given by Tom Van Zandt in a telephone interview on 01/31/2005.

3. An examiner's amendment to the amendment filed 11/10/2004 appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

4. The application has been amended as follows:

- 1) In Claim 1, line 1 (i.e. line 1 of claim 1), inserted "computer implemented" after "A" and before "method"
- 2) In Claim 1, line 4 (i.e. line 4 of claim 1), deleted "." and inserted "; and" after instruction
- 3) In Claim 1, line 5 (i.e. line 5 of claim 1), inserted "forwarding a request for new memory and the live reference information to a compiler concurrently."
- 4) In Claim 5, line 1 (i.e. line 1 of claim 5), inserted "[" before "4" and after "claim"
- 5) In Claim 5, line 1 (i.e. line 1 of claim 5), inserted "]" after "4" and before "3"

Art Unit: 2165

6) In Claim 6, line 1 (i.e. line 1 of claim 6), inserted "computer implemented" after "A" and before "method"

7) In Claim 6, line 5 (i.e. line 5 of claim 6), deleted "." and inserted "; and" after instruction

8) In Claim 6, line 6 (i.e. line 6 of claim 6), inserted "forwarding a request for new memory and the live reference information to a compiler concurrently."

9) In Claim 11, line 1 (i.e. line 1 of claim 11), inserted "computer implemented" after "An" and before "apparatus"

10) In Claim 11, line 1 (i.e. line 1 of claim 11), deleted "An" and inserted "A" before "apparatus"

11) In Claim 16, line 1 (i.e. line 1 of claim 16), inserted "computer implemented" after "An" and before "apparatus"

12) In Claim 16, line 1 (i.e. line 1 of claim 16), replaced "An" with "A"

13) In Claim 21, line 6 (i.e. line 6 of claim 21), deleted "." and inserted "; and" after instruction

14) In Claim 21, line 7 (i.e. line 7 of claim 21), inserted "forwarding a request for new memory and the live reference information to a compiler concurrently."

Art Unit: 2165

15) In Claim 26, line 7 (i.e. line 7 of claim 26), deleted "." and inserted "; and" after instruction

16) In Claim 26, line 8 (i.e. line 8 of claim 26), inserted "forwarding a request for new memory and the live reference information to a compiler concurrently."

17) In the Abstract, delete the empty space between two paragraphs to create one continuous paragraph.

Allowable Subject Matter

5. Claims 1-3,5-8,10-13,15-18,20-23,25-28,30 are allowed over the prior art of record.

Reasons For Allowance

6. The following is an examiner's statement of reasons for Allowance:

Regarding Independent claims 1,6,11,16,21 and 26, Applicant's particular method and associated system for inserting at least one null operation instruction in an instruction set and recording live reference information for a garbage collection process within a data field of the null operation instruction and forwarding a request for new memory and the live reference information to a compiler concurrently in combination with other limitations of the claims, was not disclosed by, would not have been obvious over, nor would have been fairly suggested by the prior art of record.

The dependent claims, being further limiting to the independent claims, definite and enabled by the specification are also allowed.

Art Unit: 2165

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Points of Contact

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Apu M. Mofiz whose telephone number is (571) 272-4080. The examiner can normally be reached on Monday – Thursday 8:00 A.M. to 4:30 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffrey Gaffin can be reached at (571) 272-4146. The fax numbers for the group is (571) 273-8300.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-9600.


Apu M. Mofiz
Primary Patent Examiner
Technology Center 2100

January 03,2007